Volunteer Firemen

JUNE

1942

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston, Massachusetts

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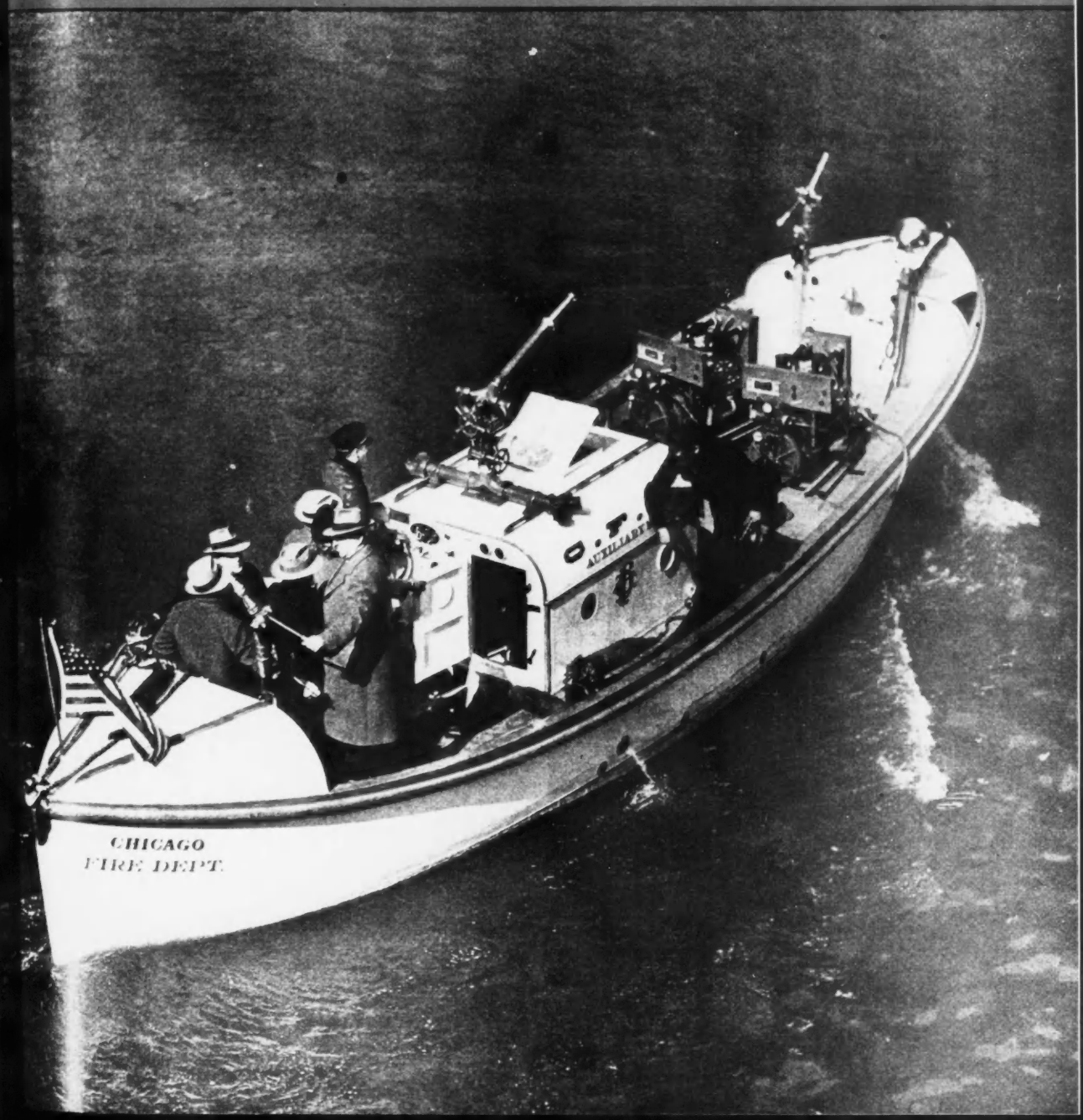
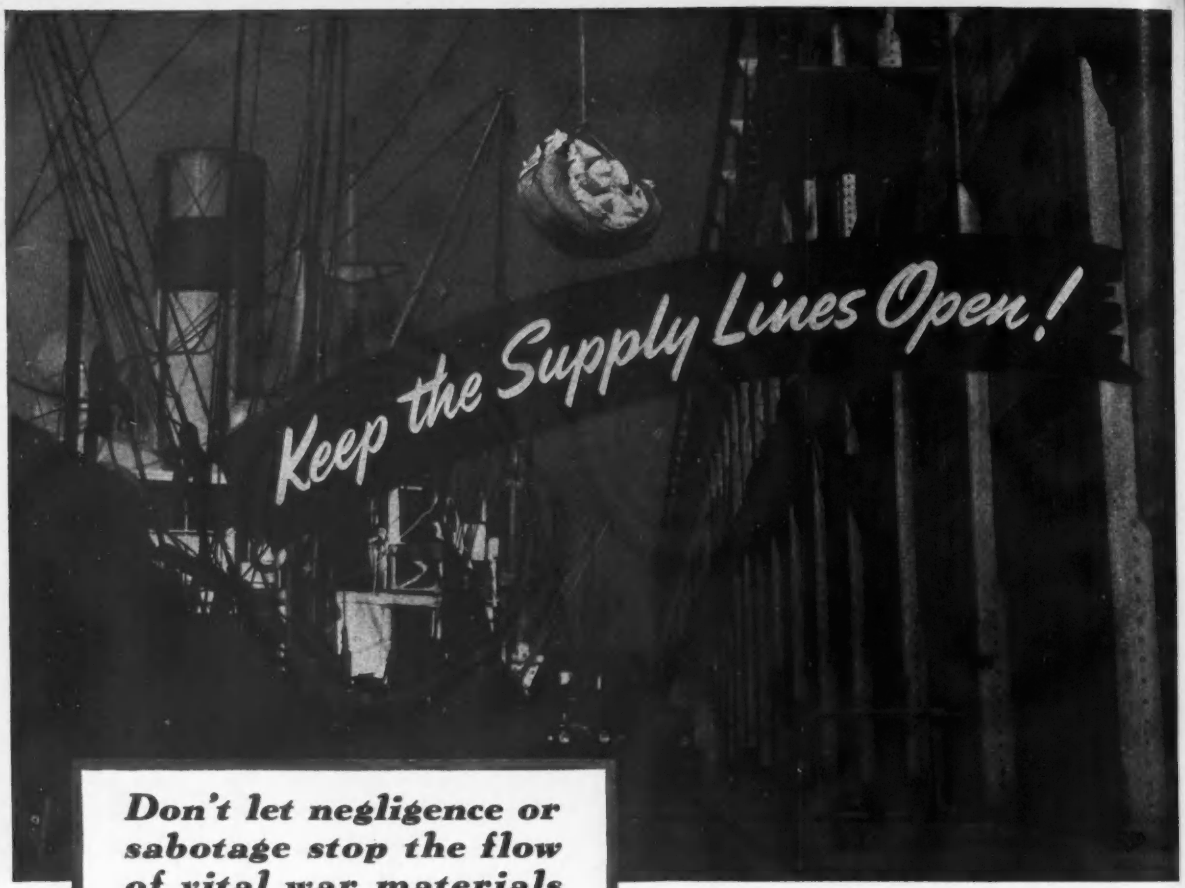


CHICAGO
FIRE DEPT.



Don't let negligence or sabotage stop the flow of vital war materials

WITH this nation's industrial activities coordinated into one vast war production program, stoppages anywhere along the line may result in serious bottle-necks with consequent delays in delivery of supplies to our armed forces. With the threat of sabotage added to all the hazards of normal times, it is essential that all-out protection measures be provided to safeguard against interruption of production or destruction of vital materials by fire or other controllable hazards.

A.D.T. Protection eliminates the twin hazards —belated discovery and delayed alarms—which so often are responsible for disastrous losses through fire, sabotage and other causes. Adoption of one or more of the services listed below may not only prove the answer to your wartime protection problems, but may result in substantial savings as well.

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★ ★ ★

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Electric Protection Services

AGAINST FIRE · BURGLARY · HOLDUP

A NATION-WIDE ORGANIZATION

Volunteer Firemen

Volume 9 Number 6

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Percy Bugbee General Manager
Robert S. Moulton Technical Secretary
Horatio Bond Chief Engineer
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How about putting your fireworks money into war bonds and stamps this year?

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IT is well known that protection of shipping and waterfront properties is of vital importance to America's war effort. The cover picture this month, courtesy Chicago Fire Department, shows Auxiliary Fireboat No. 1 recently put in service by that department. This is one of three such auxiliary fireboats obtained to supplement the larger capacity fireboats regularly serving with the department.

The Chicago auxiliary fireboats are converted Coast Guard boats donated to the city for the duration by the Sea Scouts of America. With very little work each boat was fitted out as a fireboat of 1,200 gallons per minute capacity. The pumping units for each craft consist of two 500-gallon direct drive centrifugal skid-mounted pumps. Working together the pumps supply a 1¾-inch stream through a monitor nozzle. With the original installation suction was obtained by the use of one length of 4-inch suction hose for each pump. Subsequently, the provision of sea chests and inboard suctions has increased the efficiency of the pumping units beyond their rated capacities and has eliminated the danger of accident to the suction equipment when making landings or when operating adjacent to docks.

The boats carry 900 feet of fire hose of various sizes, together with other necessary fire fighting equipment. In the event the full discharge of the pumps is not required for the monitor nozzles, it is possible to supply as many as four 2½-inch lines with the two pumps on each boat. After the picture on the cover of VOLUNTEER FIREMEN was taken the pumps were encased to protect them from the weather and short lines of hose of proper length were provided to connect the pump discharge to the monitor nozzles. Incidentally, as the pumps are provided with independent direct-drive gasoline motors, their full capacity may be obtained while the vessels are moving.

Fire department readers interested in waterfront protection will also be pleased to know that at the present time the U. S. Coast Guard is preparing to provide somewhat similar emergency fireboats in certain ports lacking adequate fireboat protection. The Coast Guard's fireboats will be reportedly of somewhat larger dimensions than the Chicago auxiliary craft. Each is expected to carry four or more 500-gallon skid-mounted centrifugal fire pumps (similar to those OCD plans to provide for fire departments in critical defense areas.) The Coast Guard fireboats will be arranged to deliver upward of 2,000 gallons per minute. They will be manned by Coast Guard personnel but will operate in cooperation with the chief of any local fire department they may be called upon to aid in an emergency.

WE have been asked by Mr. Eric H. Marks, General Salvage Section, War Production Board, to call to the attention of all N.F.P.A. members the importance of protecting scrap rubber storage from fire. It is pointed out that scrap rubber storage presents an extremely serious fire hazard. This fact is of more than usual importance due to the serious shortage of this critical material. Mr. Marks stresses the importance of moving the scrap rubber to rubber reclaiming plants as quickly as possible.

As has frequently been pointed out in VOLUNTEER FIREMEN, the most important single protective measure for the safeguarding of critical materials against fire is the subdividing of all such storage into small fire areas, well separated, so that only a small amount will be lost in any one fire.

LAST month 9 departments with 109 men joined the Volunteer Firemen's Section for the first time. Twenty-nine departments with 613 men renewed membership. This makes a total enrollment of 744 departments and 14,900 men. The following departments are newly enrolled:

San Marino Fire Department, San Marino, California.

Scotia Volunteer Fire Department, Scotia, California.

Lawrence Fire Department, Lawrence, Indiana.

Saco Fire Department, Saco, Maine.

DeWitt Fire Department, DeWitt, Michigan.

Eastwood Fire Department, Kalamazoo, Michigan.

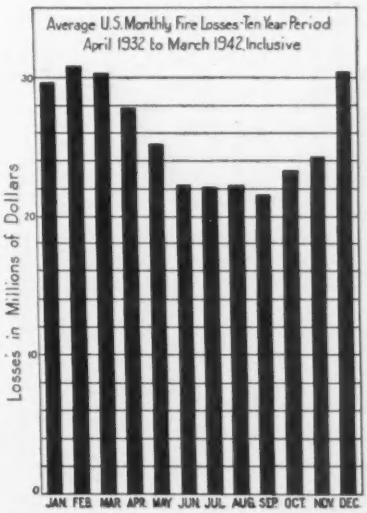
Reserve Hose Company No. 1, West Seneca, New York.

Alexis Volunteer Fire Department, Toledo, Ohio.

Scottsville Volunteer Fire Department, Scottsville, Virginia.

THE estimated U. S. fire loss for April, 1942, according to the National Board of Fire Underwriters is $27,960,000, a decrease of $1,370,000 from the same month last year. Losses for the first four months of 1942 were $11,476,000 above the same period in 1941. These figures are based on notices of incurred loss received by insurance companies, members of the board, plus an allowance for unreported and uninsured losses. The following table shows the losses for the first four months of 1941 and 1942.

	1941	1942
January	$26,470,000	$35,565,000
February	26,102,000	30,819,000
March	31,471,000	30,505,000
April	29,330,000	27,960,000
Total 4 months	$113,373,000	$124,849,000
Total 1941	$322,357,000	


Average U.S. Monthly Fire Losses-Ten Year Period
April 1932 to March 1942 Inclusive
Losses in Millions of Dollars
30
20
10
0
JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.

It is well known that seasonal conditions affect the fire loss record of almost every community. For example, many serious fires occur in the Wintertime. Also there are often many bad fires in the Spring dry season. The above chart based upon the monthly fire loss estimates as reported by the National Board of Fire Underwriters shows the average monthly fire losses in the United States for a ten year period ending in March 1942. While average figures of this nature cannot be conclusive due to a failure to take into account such factors as business cycles, and wartime conditions, they should be of some interest.

War Problems Highlight 46th Annual Meeting

The 46th N.F.P.A. Annual Meeting will be long remembered by the members who attended as one of the most interesting fire protection gatherings held in recent years. This was doubtless due to the challenge presented by the numerous wartime fire protection problems. The inclusion of three closed sessions permitting frank exchange of helpful information on the subjects of arson and sabotage, the problems of state fire coordinators, and war industry fire protection, were an outstanding feature of the convention. The Third Annual Volunteer Firemen's Forum held as part of the meeting dealt with problems vital to the volunteer fire service in wartime.

Of most importance to the volunteer firemen present at the N.F.P.A. Annual Meeting was the Third Annual Volunteer Firemen's Forum, presided over by President-elect, Dr. D. J. Price. The above picture shows Mr. A. H. Gent, Office of Chief of Engineers, U. S. Army, addressing the forum on "Apparatus for the Volunteer Company."

View of the closed session of the State Fire Co-ordinators Forum conducted Monday afternoon, May 11th, in connection with the 46th N.F.P.A. Annual Meeting held at Atlantic City. The session presided over by N.F.P.A. Chief Engineer Horatio Bond, shown at the speakers' rostrum, was devoted to a frank discussion held behind closed doors of the problems faced by state, provincial and local officials responsible for coordinating fire defense activities in their respective localities.

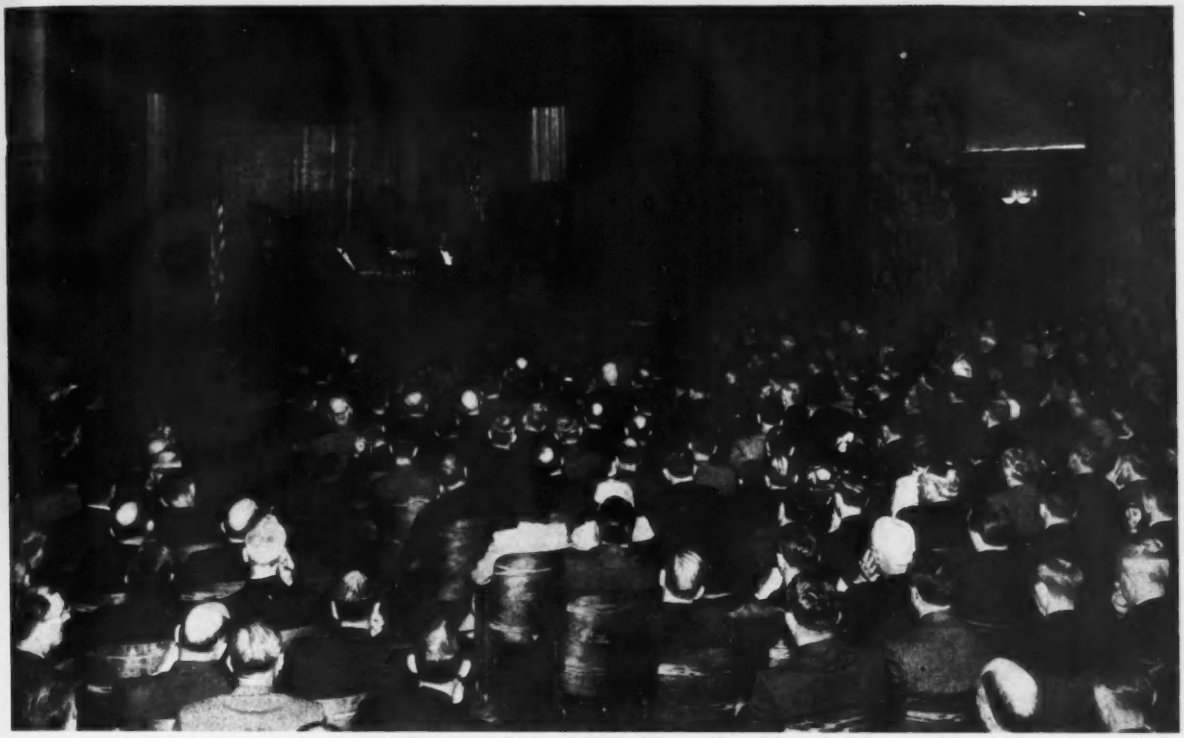
One of the highlights of the N.F.P.A. Annual Meeting this year was a nationwide broadcast over the Blue Network by Dean James M. Landis, Director, Office of Civilian Defense. Dean Landis' talk was on the subject of "Fire Protection in Civilian Defense." Dean Landis is shown at the right of the above picture while making the broadcast. At the left is retiring N.F.P.A. President Alvah Small, President of Underwriters' Laboratories, Inc., and N.F.P.A. General Manager Percy Bugbee (center) who participated in the broadcast.

DIMMED lights along the famed boardwalk and patrol vessels cruising the sea lanes off-shore gave an impressive and appropriate wartime background to the 46th N.F.P.A. Annual Meeting held at Atlantic City last month. The meeting, one of the best attended in the Association's long history, featured problems related to wartime fire protection. Speakers included most of the leading figures contending with the various fire protection problems which have arisen in connection with our war effort.

It should be gratifying to all fire departments that are members of the N.F.P.A. that such nationally important persons as Director of Civilian Defense James M. Landis; Vice Admiral R. R. Waesche, Commandant of the U. S. Coast Guard; and Rear Admiral Howard L. Vickery, Vice Chairman, U. S. Maritime Commission, were present and paid tribute to the vital part that the N.F.P.A. and its members are playing in defense against wartime fires.

The necessity of using substitute materials for fire protection services due to priority restrictions received considerable attention at the meeting. Also of particular interest to the fire fighters of the country was the attention given to the problem of obtaining emergency fire apparatus.

The photographs on these pages are presented to give a typical cross-section of the various sessions held as part of the Annual Meeting. Members unable to be present will doubtless look forward to receiving the published proceedings of the convention scheduled to be mailed with the forthcoming July *Quarterly*.



The first general session of the 46th N.F.P.A. Annual Meeting, Monday evening, May 11th, 1942. The picture of this meeting held in the Viking Room atop Haddon Hall Hotel, Atlantic City, was taken while Director James M. Landis of the U. S. Office of Civilian Defense was addressing the convention. Dean Landis' talk on the subject of "Fire Protection in Civilian Defense" struck a responsive chord when he told fire officials that for the safety of their own communities they should let auxiliary firemen train with the regular fire department equipment until emergency facilities can be made available. On the platform with Director Landis are (from left to right) General Manager Percy Bugbee, President Alvah Small, President-elect David J. Price, and Technical Secretary Robert S. Moulton.

A typical cross-section of the leaders in the fire protection fraternity in the United States and Canada is shown in this view taken at one of the general sessions of the N.F.P.A. Annual Meeting. More than 600 fire protection authorities and specialists representing almost every state and province made this gathering the most important fire protection meeting yet held to deal with the fire problems jeopardizing the war effort of the Democracies. Leading Federal, State, Provincial and Local officials of both countries took an active part in these vital deliberations.

Here Are the OCD Plans for Fire Defense Trailer Pumpers

LAST month the United States Office of Civilian Defense issued specifications on which manufacturers are invited to bid in furnishing fire defense pumping apparatus for distribution to fire departments located in coastal areas and other strategic locations. As reported previously in VOLUNTEER FIREMEN the pumping units to be provided will be either trailer mounted pumps, or skids for loading upon any truck chassis that the individual fire department may have available for the purpose, or front mounted pumps also for use with chassis furnished by the local fire department.

Plans showing approved arrangement for the trailer pumper units to be built to OCD specifications are shown on this page. Due to the shortage of rubber tires, these trailers will have wooden artillery wheels with iron rims. Otherwise they should prove to be very satisfactory fire fighting units as the equipment to be provided with each pump unit will include the various essential items provided as part of the equipment of most pumper companies.

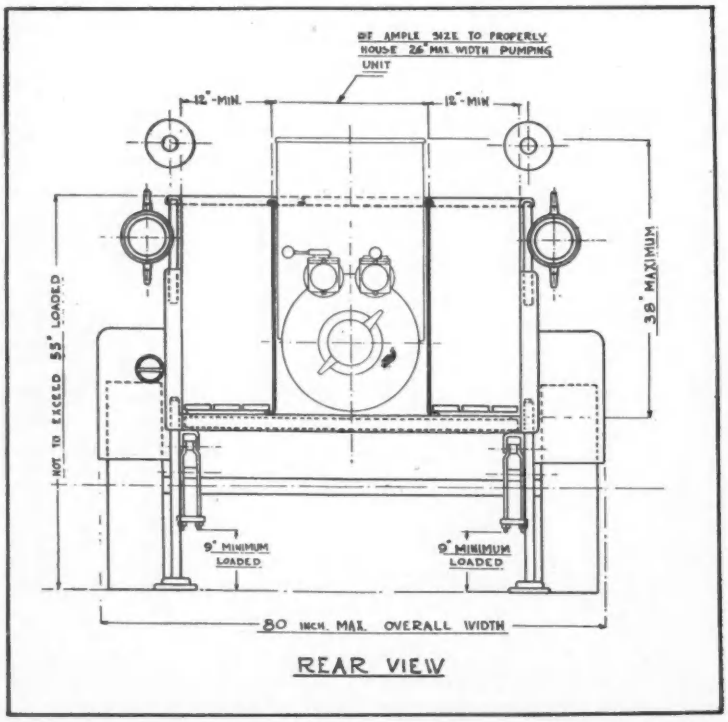
It is pointed out by OCD that the plans for these trailer pumpers are merely suggested arrangements conforming to the specifications. If fire apparatus manufacturers wish to make slight changes of arrangement to achieve the same result they can do so.

The plans as issued were approved by the Fire Defense Advisory Committee of OCD as being the best results obtainable under the present wartime conditions. The plans substantially conform to N.F.P.A. Specifications for Auxiliary Pumpers in so far as is possible under existing conditions.

N.F.P.A. Members Advising OCD

TWO N.F.P.A. members particularly well known to the firemen of the country are now serving in important advisory posts with the United States Office of Civilian Defense. One of these is Colonel Clarence Goldsmith, Assistant Chief Engineer of the National Board of Fire Underwriters and a member of six important N.F.P.A. Technical Committees including those on Firemen's Training, Municipal Fire Apparatus, and Farm Fire Protection. For some time Colonel Goldsmith has been in Washington as adviser to the War Department on all matters pertaining to fire protection and water distribution systems in connection with Army construction work. OCD Director James M. Landis has recently appointed Colonel Goldsmith Chief Consultant to the Fire Defense Section. Mr. Goldsmith will advise on fire department organization for civilian defense, fire defense education, the training of auxiliary firemen, and design of fire fighting equipment.

W. Fred Heisler of Oklahoma A. & M. College, Chairman, N.F.P.A. Committee on Firemen's Training, is in Washington on temporary assignment to the Fire Defense Section of OCD on a program of training of auxiliary firemen. Mr. Heisler is widely known to the firemen of the country as the author of the many excellent firemen's training texts issued by Oklahoma A. & M. College, and prepared in cooperation with the Trade and Industrial Division of the State Department of Education. Mr. Heisler is also co-author of the new N.F.P.A. Training Manual for Auxiliary Firemen recently announced.



This shows the arrangement of the hose compartments and pump unit of the OCD trailer pumpers as viewed from the rear. The hose compartment on each side will carry 350 feet of 2½-inch hose and 150 feet of 1½-inch hose.

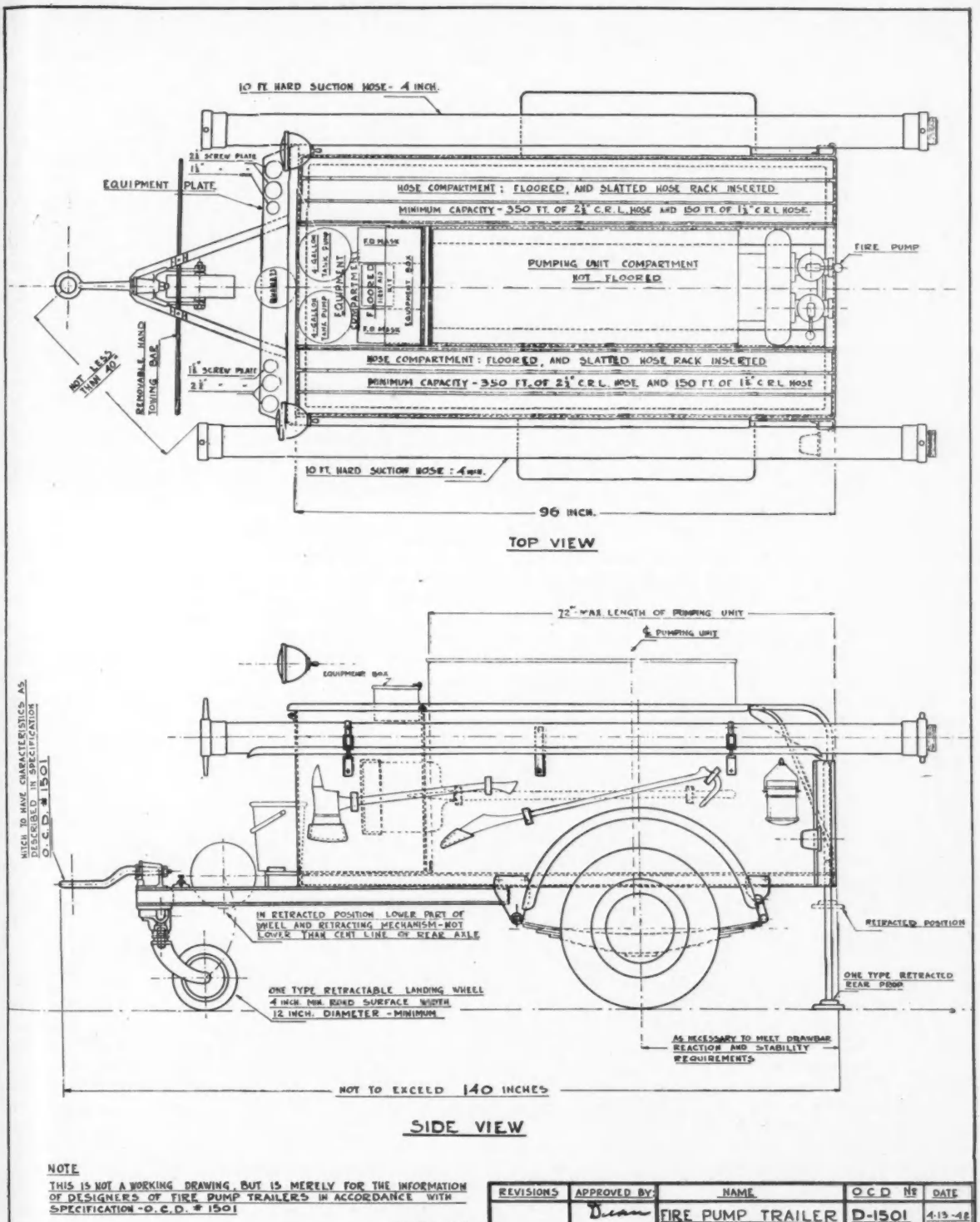
"Listen To This!", a New Fire Protection Radio Program

ON Friday afternoon, April 24th, at four o'clock, a new radio series entitled "Listen To This!" was inaugurated at WMUR, Manchester, New Hampshire's 5,000-watt station.

"Listen To This!" is written and presented each week at this hour by John B. Fisher of the N.F.P.A. executive staff. Designed as both an entertaining and educational quarter-hour, each program is dedicated to the firefighters of the United States and Canada and their comments upon it are welcome at all times.

During 1940 and 1941, John B. Fisher was heard regularly from station WBZ in Boston and stations KFI and KECA in Hollywood as the author and narrator of the unusual series, "Great Fires of History." These dramatic stories of famous fires of the past found a wide appeal among listeners of all ages and convinced the author of the tremendous fire prevention value to be gained from this type of radio entertainment. All the world loves a good story and a story well told can work wonders in fire prevention work.

Fire-fighters in Maine, New Hampshire, Vermont and lower Canada are particularly urged not to miss "Listen To This!", every Friday at four, from WMUR in Manchester.


10 FT. HARD SUCTION HOSE - 4 INCH.
2½ SCREW PLATE
1½ " "
EQUIPMENT PLATE
HOSE COMPARTMENT: FLOORED, AND SLATTED HOSE RACK INSERTED
MINIMUM CAPACITY - 350 FT. OF 2½" C.R.L. HOSE AND 150 FT. OF 1½" C.R.L. HOSE.
F.D. HOSE
4 GALLON CHEMICAL TANK
EQUIPMENT COMPARTMENT
FLOORED
F.D. HOSE
PUMPING UNIT COMPARTMENT
NOT FLOORED
FIRE PUMP
NOT LESS THAN 40"
REMOVABLE HAND TOWING BAR
1½ SCREW PLATE
2½ " "
HOSE COMPARTMENT: FLOORED, AND SLATTED HOSE RACK INSERTED
MINIMUM CAPACITY - 350 FT. OF 2½" C.R.L. HOSE AND 150 FT. OF 1½" C.R.L. HOSE
10 FT. HARD SUCTION HOSE - 4 INCH.
96 INCH.
TOP VIEW
72" MAX. LENGTH OF PUMPING UNIT
PUMPING UNIT
EQUIPMENT BOX
WHICH TO HAVE CHARACTERISTICS AS DESCRIBED IN SPECIFICATION O.C.D. # 1501
IN RETRACTED POSITION LOWER PART OF WHEEL AND RETRACTING MECHANISM - NOT LOWER THAN CENT LINE OF REAR AXLE
RETRACTED POSITION
ONE TYPE RETRACTED REAR PEDD
ONE TYPE RETRACTABLE LANDING WHEEL 4 INCH MIN. ROAD SURFACE WIDTH 12 INCH. DIAMETER - MINIMUM
AS NECESSARY TO MEET DRAWBAR REACTION AND STABILITY REQUIREMENTS
NOT TO EXCEED 140 INCHES
SIDE VIEW
NOTE
THIS IS NOT A WORKING DRAWING. BUT IS MERELY FOR THE INFORMATION OF DESIGNERS OF FIRE PUMP TRAILERS IN ACCORDANCE WITH SPECIFICATION - O.C.D. # 1501
NOT TO SCALE
REVISIONS
APPROVED BY:
NAME
FIRE PUMP TRAILER
O C D Nº
D-1501
DATE
4-13-42

Here are top and side views of the fire defense trailer pumpers to be built to OCD specifications. It will be seen that these are real fire fighting machines having a 500-gallon pump, carrying a total of 1000 feet of fire hose, gas masks, pump tanks and other engine company equipment.

New York Water Works Men Plan Mutual Aid

The 500-gallon-per-minute trailer pumper shown is one of several recently put in service by the Washington Suburban Sanitary Commission serving areas of Maryland adjacent to Washington, D. C. These pumpers are provided for the purpose of bridging any breaks in water distribution mains due to bombings or other causes. Water can be taken from hydrants on one side of a broken main and pumped into hydrants beyond the break to maintain service beyond. Each of these trailer pumps are provided with chlorinator attachments so that if necessary raw water can be pumped from brooks, wells, or other emergency sources without danger of pollution.

Washington Post photo

MANY firemen may be surprised to learn that mutual-aid plans for intercommunity action against emergencies are not confined solely to the fire service. It may be of equal or greater importance for the water service of adjoining municipalities to help each other out when a tough situation arises. A major fire, an air attack, or other emergency may cause a situation where more skilled waterworks crews are needed than the local service can provide. Extra fittings, valves, plugs, and other connections may be needed in a hurry after raiding planes have passed over in order that there may be water available for fire fighters as well as water for domestic consumption and for industrial plants so vital to war production.

The Journal of the American Water Works Association for February, 1942, in an article by A. F. Dappert, Principal Sanitary Engineer, N. Y. State Department of Health, describes the "New York State Mutual Aid Plan for Water Service in Case of Emergencies." The plan was formulated by a committee of waterworks officials appointed by the State Conference of Mayors and the State Department of Health at the request of Governor Lehman. A special advisory committee also aided in the formulation of the plan which was approved by the Governor last October.

Briefly stated, the general objective of the plan is to prepare New York State municipalities to maintain adequate, effective and safe water service under any possible emergency that may arise, either as a result of war or from natural causes, and to achieve this state of preparation with the least possible delay. Each local authority is expected to take definite steps to: (1) protect water supplies; (2) reinforce or correct weaknesses in water supplies and distribution systems; (3) bring water supplies to the highest possible level of operating efficiency; (4) make specific plans for the handling of emergency situations; and (5) co-operate in a mutual aid arrangement whereby any community in distress may be supplied promptly with assistance from nearby communities.

For the purposes of administration, the state was divided into 23 zones, which largely conform to existing state health districts. Zone coordinators have been appointed to assist local water authorities in putting the plan in effective operation. The plan has aimed to have local water officials constituted an integral part of the local defense organization of each community but completely in charge of all water supply matters as well as the volunteer workers assigned to emergency water duties. It is pointed out that interconnection between public water supplies and approved supplies of industries or other approved sources should be made to the fullest extent possible.

Up-to-date maps of distributing systems and adequate detailed records of valve locations are essential to any plan designed to meet emergencies. It is one of the purposes of the plan to have such records brought up to date. In a surprisingly large number of communities, it is reported that no adequate maps are available and all detailed information concerning the system is carried in the head of the local water superintendent. Much effort is being expended now to have all the essential data concerning each system reduced to a permanent record available for quick reference.

UNDER the plan, local water authorities are specifically urged to cooperate with fire officials in regard to matters of mutual interest. The following cooperative studies are suggested in each community: (1) A detailed survey should be made of all possible sources of water supply which may be needed in a disastrous fire or acute emergency, and of the equipment needed for utilization of such water sources. (2) Fire officials should have full knowledge of the location and characteristics of all fire hydrants and valves and these hydrants and valves should be tested with sufficient frequency to assure proper operation. Hydrant adapters should be provided as required. (3) A detailed study should be made by each distributing system, with particular reference to bottlenecks and weaknesses, and steps should be taken to correct these.

As power failures may cut off vital water supplies, cooperation between power and water authorities is also necessary. Steps must be taken to provide auxiliary power equipment or self-powered pumping units. Where a defense industry is located in a community there should be a study of both the fire and water service furnished to such industry, made jointly by the local fire and water officials and by the representatives of the industry.

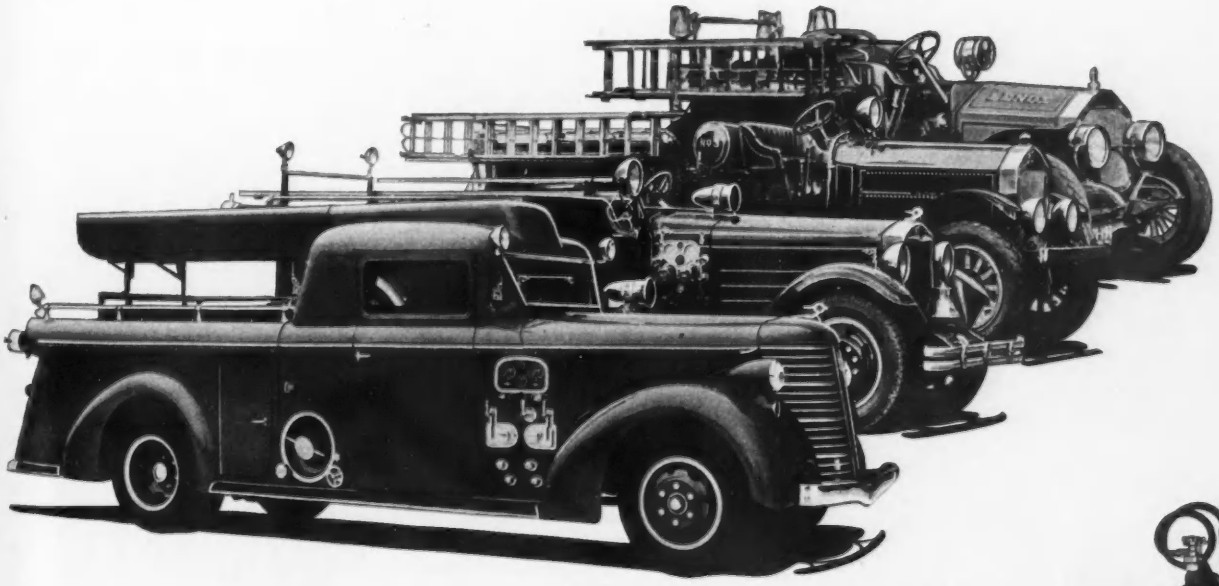
One of the primary purposes of the mutual aid plan for the water service is to assist neighboring communities in distress. To accomplish this, it is necessary that the resources and facilities of all communities be pooled in such a way that if an extreme need for personnel or equipment arises in any community, the need may be met promptly. Accordingly inventory forms were distributed to all local water authorities in New York State by the zone coordinators. With these inventories at hand, the zone coordinator serves as a clearing house through which emergency requests for equipment, personnel or supplies may be handled.

Keep 'em Fit—and Ready!

Old or new—but ready when the gong strikes—will help beat our enemies. Conserve and repair your fire fighting equipment—keep it in readiness for full service duty. Fire engines out of service do not help to extinguish fires!

American-LaFrance quick and dependable service is available to assist in conditioning your apparatus.

Hundreds of American-LaFrance fire engines that served through World War I are in this war too, rendering dependable protection for America's homes and industries. In these critical days the quality and dependability of American-LaFrance fire apparatus is again proven by low cost maintenance and the unfailing protection afforded. Insist on American-LaFrance for your best protection.



American-LaFrance number one motorized (1910) is still in active service with thousands of other American-LaFrance fire engines—all maintained by dependable American-LaFrance service. You buy the world's finest when you buy American-LaFrance.

AMERICAN-LAFRANCE-FOAMITE CORPORATION

Engineers and Manufacturers

WATER or FIRE DAMAGE?

Which might shut you down faster—a roaring fire or a deluge of water from fire hoses? It's any man's guess, but it is a fact that C-O-TWO* extinguishes fire in highly flammable liquids; in electrical equipment; storage vaults or enclosures, in split seconds without damage to materials or equipment, and there will be no mopping up afterwards and no delay to production.

IT'S SAFER *because* IT'S FASTER

The extinguishing agent of C-O-TWO is carbon dioxide, one of the fastest fire extinguishing agents ever discovered. There are C-O-TWO portables, hose units, automatic and manual systems for special hazards to give your plant maximum fire protection. Write for information.

Extinguishing a transformer fire with C-O-TWO portable unit.

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FIRE EQUIPMENT CO.
NEWARK, N. J.

C-O-TWO *Sales and Service in the Principal Cities of United States and Canada.*

Examining the first pump tank extinguisher off the assembly line are (left to right) William T. French, Chief of the Fire Defense Section of the Civilian Protection Division, Major-General Lorenzo D. Gasser, Director of the Civilian Protection Division, and Director James M. Landis of OCD. Two million of these units will be distributed, four to each city block, in strategic defense areas. The extinguishers are designed to use materials not essential to the production of munitions of war. The brass pump plunger has been replaced with porcelain-coated steel and synthetic rubber; special nozzles have been made of simple cast lead or plastic, and the hose has been made entirely of reclaimed rubber.

2,000,000 Pump Tanks for Defense Planned by OCD

As reported in previous issues of VOLUNTEER FIREMEN, the U. S. Office of Civilian Defense has developed a four gallon pump tank fire extinguisher which will be distributed by OCD to cities within the 300-mile coastal target area and to certain other strategic cities to meet the threat of fires caused by enemy action. The first of these new fire fighting appliances has now rolled off the production lines. In all more than 2,000,000 of these pump tank extinguishers will be distributed at the ratio of four to each city block in the target area as well as to fire departments.

The pump tank extinguisher as shown was developed by the Fire Defense Section of OCD in cooperation with the Office of Chief of Engineers, U. S. Army, the Underwriters' Laboratories, Inc., and the National Bureau of Standards. In developing the pump tank the Fire Defense Section of OCD was aided by the Fire Advisory Committee of Civilian Defense consisting of the following representatives of national organizations in the fire protection field. The Chairman of the committee is N.F.P.A. Honorary Member George W. Booth, Chief Engineer of the National Board of Fire Underwriters. William T. French, OCD Fire Defense Section, is Executive Secretary. Other N.F.P.A. members comprising the committee include the new N.F.P.A. President-elect, Dr. D. J. Price, U. S. Department of Agriculture, Horatio Bond, Chief Engineer, N.F.P.A., Chief W. Hendrix Palmer of Charlotte, N. C., official representative, International Association of Fire Chiefs, George J. Richardson, Secretary, International Association of Fire Fighters, R. E. Wilson, Associate Manager, National Bureau for Industrial Protection, W. W. Dean, Office of Chief of Engineers, U. S. Army, Lieutenant

The first of a new 4-gallon pump tank type of fire extinguisher developed by the Fire Defense Advisory Committee of OCD for distribution in strategic defense areas. The extinguisher shown has the distinction of carrying special war label No. 1 of Underwriters' Laboratories, Inc., and was manufactured by the Fyr Fyter Company of Dayton, Ohio.

Commander Harold K. Hughes, Bureau of Yards and Docks, U. S. Navy, and George W. Angell, Chief, Fire Equipment Section, Division of Industry Operations, War Production Board.

Will Your Car Start When the Siren Sounds?

WITH the restrictions on the purchase of automobile tires and the rationing of gasoline now being enforced in substantial areas of the United States and in Canada, volunteer firemen will be using their private cars less and less.

When automobiles are left standing unused for extended periods, at least two changes occur that have a serious effect on the dependability of operation. Batteries deteriorate and tires go flat. It requires but little imagination to visualize a situation in which a volunteer fireman may be delayed in his response to an alarm because his car will not start, or because it cannot be driven due to flat tires. The following suggestions are offered to volunteer firemen with a view to preventing failure of their cars in times of emergency.

According to a leading battery manufacturer, there are seven common causes of run-down batteries and starting failures. (1) The battery itself may be worn out, of poor quality, or undersized. (2) The cables may be worn, corroded, or undersized. (3) Switches may be accidentally left on or short circuits in the wiring may deplete the battery. (4) Improper grades of oil in the crankcase increase the difficulty of starting with resultant drain on the battery. (5) Worn, fouled, or improperly adjusted spark plugs prevent proper ignition. (6) Poor grades of gasoline require prolonged cranking. (7) The generator charging rate may be inadequate for the requirements of the car.

Firemen who depend upon their automobiles for emergency use should be sure that none of the abovementioned conditions exists, but even where these conditions do not apply, further attention must be given to the battery if the car is to be left unused for any considerable period. If the car is operated only rarely it is quite probable that the generator will not be able to maintain the battery charge. Accordingly, it is desirable to check the condition of the battery from time to time and to maintain the fluid level by the addition of distilled water only. To determine the amount of the charge in the battery, a hydrometer should be used. These inexpensive devices are readily obtainable from any automotive supply store or battery shop. Battery manufacturers advise that whenever the hydrometer reading of the battery fluid falls below 1.240 or when it has dropped 30 points or more below its fully charged value, the battery should be recharged. A less certain rule to follow is that the average safe time that a battery can stand unattended is two or three weeks in summer and three or four weeks in winter. Temperature of the garage, and the age, quality and care of the battery have an influence on the length of this safe period.

Widespread publicity has been given to the need for and the means of conserving automobile tires and avoiding needless wear. It is not necessary to repeat here these conservation and maintenance practices which prolong the life of tires. Even a new tire will lose pressure eventually, however, if allowed to stand long enough. It is a well-known phenomenon that spare tires become soft while being carried on a car unused. Firemen are urged to observe the suggestions of the tire manufacturers and to make sure that inflation valves do not leak. Beyond these suggestions however, it is essential that even though the car remains unused, its tires be examined frequently to detect loss of pressure.

On Guard -WHEREVER DUTY CALLS!

The Streamlined M·S·A FIREMAN'S HELMET

This favorite modern Helmet has what it takes to meet the fireman's new head protection demands! Laminated bakelite, one piece molded, provides tremendous resistance to impact — the Helmet can't soften from exposure to water, grease, heat or common chemicals — supplies balanced comfort and wearing ease through long hours of emergency duty. Write for Bulletin No. DX-5!

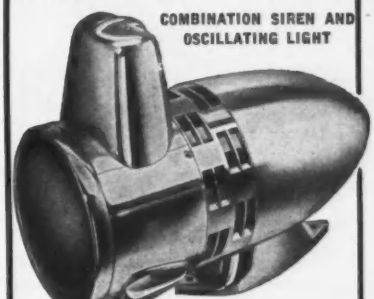
MINE SAFETY APPLIANCES CO.
BRADDOCK, THOMAS AND MEADE STREETS, PITTSBURGH, PA.
District Representatives in Principal Cities

Even the Deaf JUMP!

when you clear the way with your

TRAFFIK-KING

COMBINATION SIREN AND OSCILLATING LIGHT



FREE DEMONSTRATION OFFER!
WRITE FOR COMPLETE DETAILS AND CATALOG TODAY!

FEDERAL ELECTRIC CO., Inc.
"SIREN HEADQUARTERS"
8717 South State St. Chicago, Ill.

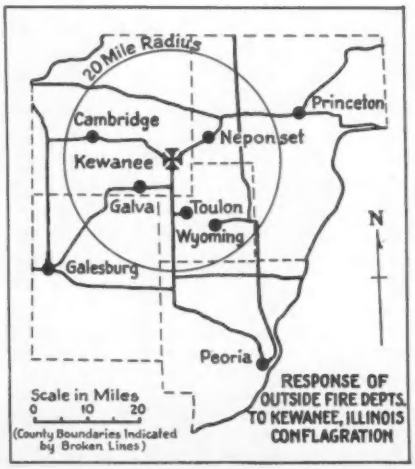
Wide World

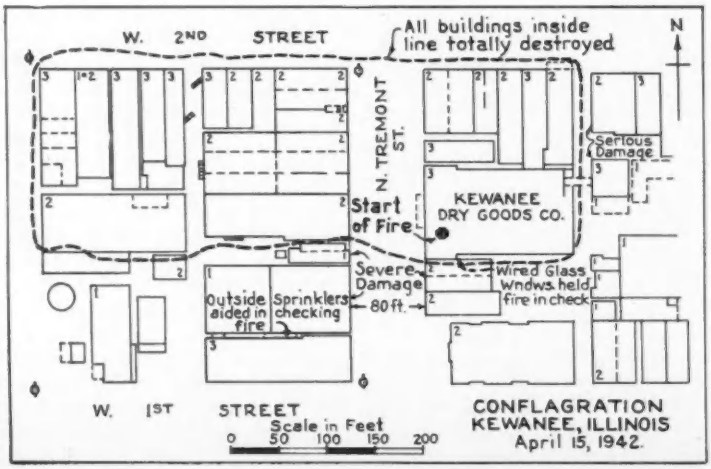
View of the devastation wrought by a $1,500,000 conflagration that swept through a portion of the business district of Kewanee, Illinois, early on the morning of April 13, 1942. The blaze, beyond control when the first firemen arrived, was checked through the aid of eight outside departments after seventeen buildings had been destroyed and ten other structures were damaged.

CONFLAGRATION IN KEWANEE

A WATCHMAN, sweeping the second floor of the large unsprinklered three story brick-joisted building of the Kewanee Dry Goods Company, smelled smoke about 1:37 A.M. on the morning of April 13, 1942. He telephoned to the fire department but found that a more observant janitor of an adjacent building and a policeman had already given the alarm. When the five permanent firemen on duty arrived with the pumper, flames were shooting through the windows above the loading platform at the rear of the building. The fire quickly spread up the open stair and elevator shafts from the basement to the third floor of the building which was 84 feet wide and had a depth of 150 feet. The off-shift was promptly called and responded with a pumper-ladder truck.

A HIGH wind was blowing from the south to south-east. By approximately 2 A.M. it was evident that the fire was out of control. Windows across the 80-foot width of North Tremont Street at the front of the building, were breaking. The intense heat made it necessary for the pumper to retreat and some hose was lost. About this time help was called from various departments within approximately a 50-mile radius as shown on an accompanying map. Fortunately, the water supplies were ample at all times and permitted the use of 14 pumper streams including a deluge set, and six direct hydrant streams after help arrived. The fire was brought under control by 4:30 A.M.





Jap Attack on Honolulu Described on Radio

FIRE Chief W. W. Blaisdell of the Honolulu Fire Department was heard internationally on April 16th broadcasting from Hawaii over the facilities of the Blue Network. The program was arranged by the N.F.P.A shortly after receiving Chief Blaisdell's dramatic and informative letter from Hawaii last December, in which he described vividly the experiences of the officers and men of his department during the murderous Jap attack of last December 7th. (VOLUNTEER FIREMEN, February, 1942, page 4). Chief Blaisdell also told of steps taken to increase the fire force at Honolulu since the Jap attack.

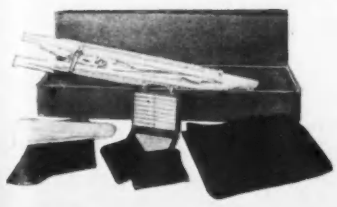
The N.F.P.A. Executive office will have a transcription of this broadcast which will be available to local radio stations upon request.

ANNOUNCEMENTS

The Massachusetts Institute of Technology, Cambridge, Massachusetts, announces a summer conference on Fire Protection Engineering to be held June 22-24th in cooperation with the N.F.P.A. The conference was arranged due to the urgent need for education regarding fire protection. Applications for registration will be considered in the order in which they are received up until June 10, 1942. A registration fee of $10 is required. A complete set of conference papers will be furnished each registrant attending. Dormitory facilities will be available at a cost of $4 to $8 per week.

Pyrene Manufacturing Company, Newark, N. J., announces its Phomaire Fire Pump Trailer described as an entirely new self-contained water and foam pumper. The unit is capable of producing 1,400 gallons of foam with the materials included on the trailer. Additional supplies of foam may be carried and operation maintained indefinitely by replenishing the water supply or by taking suction with the pumps on the unit.

Mine Safety Appliances Company, Pittsburgh, Pa., announces the addition of two new first aid items to its line of safety equipment. These are the M.S.A. folding stretcher outfit and the M.S.A. wood traction splint illustrated below.



TRADE MARK
GAMEWELL
REG. U.S. PAT. OFF.

Specialists in Public Safety

Manufacturers of Emergency Signaling Systems

FIRE ALARM
POLICE SIGNALING
AIR RAID WARNING
INDUSTRIAL FIRE ALARM
FIRE & WATCHMEN SUPERVISORY
AUTOMATIC FIRE DETECTION

Two thousand municipalities, several thousand industrial plants and many of the largest institutions now use Gamewell Systems for the protection of life and property and to ensure the permanency of established business.

We freely cooperate in planning protective Signaling Systems.

THE GAMEWELL COMPANY
NEWTON UPPER FALLS, MASSACHUSETTS

What Does **"FIREPROOF"** *Mean?*

The architect, the builder and the building inspector all said this building was fireproof. And they were right! The *building didn't burn . . . it collapsed* under the intense heat from the *combustible contents.*

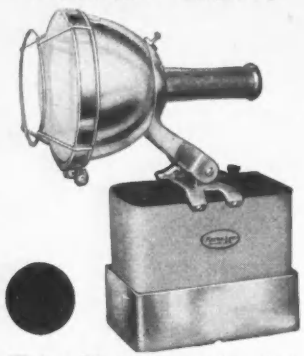
Modern fireproof construction *alone* can't prevent this hazard in a busy plant filled with equipment and materials. It takes automatic sprinkler fire protection, too . . . positive, ever-vigilant Grinnell Systems that *stop fire at its source.*

Grinnell Systems are your best guardians . . . built by the world's leader in fire protection . . . prefabricated to Grinnell-engineered layouts . . . proved dependable by 8000 fires killed in the past ten years!

Grinnell Company, Inc. Executive Offices: Providence, R. I. Branch offices in principal cities of U. S. and Canada.

GRINNELL
Automatic Sprinkler Fire Protection

MASTER ★ LIGHTS



EMERGENCY LIGHTS
for
FIRE CHIEFS
•
FIREMEN
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SUPER-POWERFUL RECHARGEABLE !
•
ONE FOR EVERY NEED
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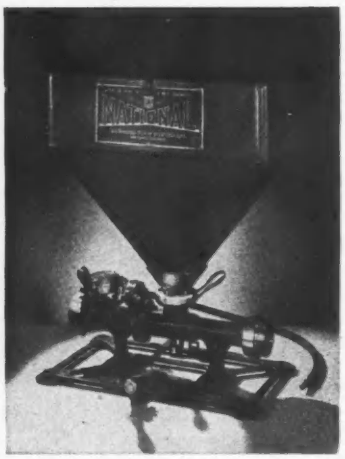
"MASTER★LIGHT★MAKERS"
CARPENTER MFG. CO.
167 Sidney St., Cambridge, Mass.



SPECIAL EQUIPMENT
FOR FIRE DEPARTMENTS
NATIONAL
SF-21
FOAM GENERATOR
for running board mounting
Capacity—
1100 gallons of foam per minute
Write for details to:
NATIONAL FOAM SYSTEM
INCORPORATED
1633 Sansom St., Philadelphia, Penna.

$10.00-$3.00-$2.00 EACH MONTH

PYRENE PRIZE LETTER CONTEST

EVERY month the above cash prizes are paid out to firemen whose letters contain the best stories. Persons not holding membership in a fire company, brigade, or department, cannot enter this contest which is limited to firemen. More fires are put out with fire extinguishers than by any other means. It so happens that this month all three prize winners told stories about fires put out with foam extinguishers but any approved extinguisher has an equal chance in the contest. The stories reported in this contest show the value of having an extinguisher handy. It's the story we want, not letter writing ability. Get the facts down on paper and we will attend to any rewriting necessary to get the story into the space available in these columns.

The contest is sponsored cooperatively by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN to bring forth the lessons learned from actual fires of the value of fire extinguishers.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.

2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.

3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.

4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.

5. Only one letter may be submitted each month.

6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.

7. Letters received after the 8th day of the month will be judged in following month's competition.

8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.

9. Address contest letters to Pyrene Prize Letter Contest, VOLUNTEER FIREMEN, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

FIRST PRIZE—$10.00

WILBUR P. STEHMAN, *Assistant Foreman*
Bethlehem Steel Company Fire Dept.
Steelton, Pennsylvania

Foam Engine was Nearby!

One day, during the summer of 1941, we received an alarm from the coke ovens. We immediately jumped on the fire truck and proceeded to the scene of the fire, which was three miles from our fire station. Upon arrival at the fire, we found a 10,000-gallon tank car of hot pitch on fire. Quickly taking a 40-gallon foam engine, which was standing nearby, we extinguished the fire in a few minutes. Due to the quick smothering effect of the foam, produced by this 40-gallon foam engine, there was no damage done to the pitch, tank car, or pitch plant. This pitch plant was recently erected at the coke ovens.

SECOND PRIZE—$3.00

W. R. WILLIS, *Drillmaster*
Kilgore Fire Department
Kilgore, Texas

Airport Fire

We recently received an alarm from the local airport. Although we knew that the location was beyond the city limits and that if the fire got a good start there would not be a sufficient supply of water, we responded with one truck to do what we could. Upon arrival we found that a gasoline line on a stationary airplane motor, used to train new pilots, had broken and escaping gasoline had caught fire. However, quick-thinking students had put out the blaze with two foam extinguishers, with a small resulting loss of about five dollars. If it had not been for these extinguishers the main hangar and about ten Army training planes might have been lost.

THIRD PRIZE—$2.00

HOWARD SMITH, *Chief*
Brooklyn Volunteer Fire Department
Brooklyn, Wisconsin

Burnt Pop Corn!

One Saturday evening last summer while I was in the store where I work, a man came running into the building and cried that the popcorn wagon was on fire. The wagon was located about a rod (16½ feet) from our store and situated near a grandstand seating a large group of people watching open-air movies. I summoned one of the clerks in the store to call the fire department and then ran down cellar and got our 2½-gallon foam extinguisher. The blaze was out before the department arrived. The wagon contained a gasoline stove and although the inside of the wagon was charred it did not explode.

. . . Never throw a solid stream on a bomb--USE THE FINE SPRAY OF AN INDIAN FIRE PUMP

THESE INDIANS ARE ON THE WAR PATH!

Protect any War Industry or Camp from outside fires

INDIAN FIRE PUMPS

are to the fire department what a battery of machine guns is to a regiment in the field. INDIANS are a portable, fast means of stopping attacks of fire in any form. Clear water is their ammunition. GET YOUR INDIANS NOW—and stand *"at ease."* Incendiary bombs, sabotage, grass and forest fires,—you can handle them all with INDIANS.

D. B. SMITH & Co., 419 MAIN ST., Utica, N.Y.

Hercules Equipment & Rubber Co. San Francisco, Cal.

PACIFIC COAST AGENTS:

The Conwhit Co. Klamath Falls, Ore.

Mill & Mine Supply, Inc. Seattle, Wash.

Carco-Conwhit Sales Co. Portland, Ore.

Roy G. Davis Company Los Angeles, Cal.

Every member receives this handsome membership certificate.

Membership in the N.F.P.A.

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

INDIVIDUAL membership in the National Fire Protection Association costs $10 per year. The membership plan for the Volunteer Firemen's Section is designed to give each fire company the advantages of N.F.P.A. membership. The fire company, as a member, receives at its headquarters a complete set of all regular N.F.P.A. literature, including the *Quarterly magazine,* as issued. In addition, as a special service to the Volunteer Firemen's Section, each fire company holding N.F.P.A. membership is entitled to have copies of the magazine VOLUNTEER FIREMEN sent to the home addresses of 10 firemen each month. If more than 10 firemen want to receive the magazine, an additional one dollar should be sent in with the membership fee for each fireman in excess of 10 enrolled.

Because of the large amount of material mailed to members, not less than $10 can be accepted from any company.

A Fire Department Manual

Hose

and Hose Couplings

Informative material on the selection, care and testing of hose and hose couplings, compiled from recommendations of N.F.P.A. committees and other authoritative sources.

Forty pages, Price 25 cents

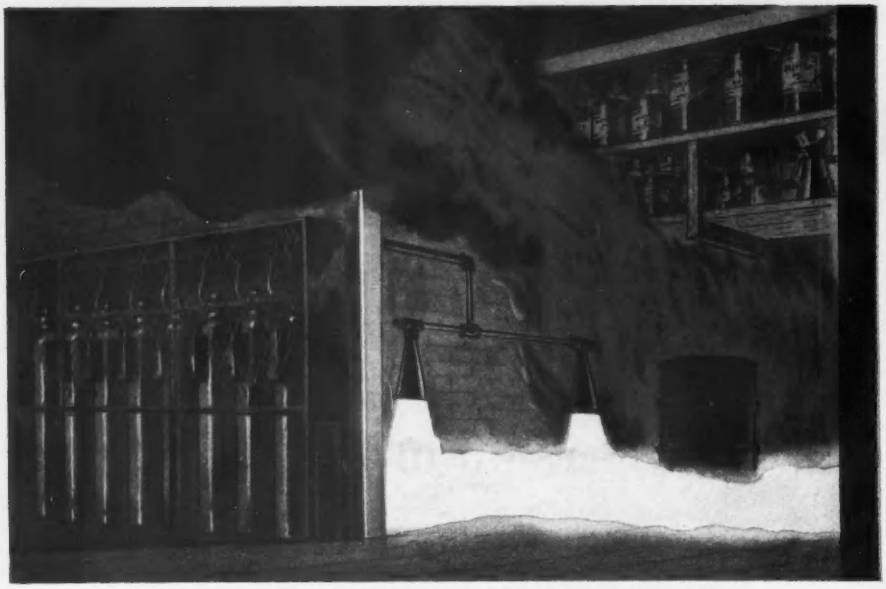
National Fire Protection Association, International

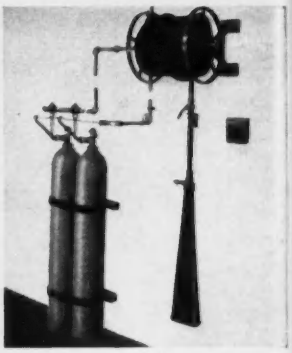
Executive Office: 60 Batterymarch Street, Boston, Mass.

CONTENTS

Kinds of Hose
Fire Department Hose Specifications
Care of Cotton Rubber-Lined Fire Hose
Loading Hose on Fire Truck
Hose Houses
Care in Handling Hose at Fires
Testing Hose
Washing and Drying Hose
Hose for Booster and Chemical Service
Suction Hose
Unlined Linen Fire Hose
Hose Couplings
Standard Threads for Fire Hose Couplings
Fire Department Hose Record Card

FIRE AND HOW TO FIGHT IT!





GIVES EXTRA PROTECTION

Here's an idea for those fire hazards which are too big for portable extinguishers to handle, yet too small for a built-in system. You'll find a LUX Hose Reel does the trick. A set of LUX carbon dioxide cylinders is hooked up to a length of hose equipped with a special discharge nozzle.

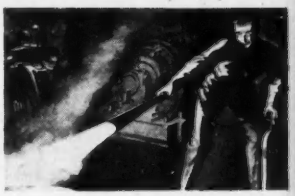
Cargo ships use LUX Hose Reels to guard machinery spaces, boiler rooms. Industry likes these units for small dip-tanks and cooking kettles. Have you this kind of fire hazard?

GET THIS FIRE-FIGHTING GIANT FOR YOUR BIG, TOUGH FIRE HAZARDS

Many fire hazards are simply *too big* for portable extinguishers. Your plant probably has several such danger spots . . . a room where you store flammable liquids . . . a process room . . . a big cooking kettle . . . a dip-tank. These call for up-to-date *built-in protection.*

A Built-In LUX carbon dioxide extinguishing system is engineered to definite fire protection principles. Size and intensity of fire hazard determines whether you need 10 pounds or 10 tons of carbon dioxide in LUX cylinders . . . whether operation must be *automatic,* or *manually* controlled . . . whether one set of LUX cylinders may guard two separate hazard areas. That is *modern "engineered fire protection!"*

That is why LUX Built-In Systems handle big, tough fires with such ease. A flash of flame, a roar of fire . . . then a blast of carbon dioxide gas overpowers the blaze. LUX gas is one of fastest of all extinguishing agents despite fact that it does not harm materials or equipment. And a Built-In LUX System kills fire with brutal efficiency.



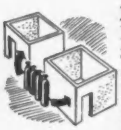
FOR ELECTRICAL FIRES

When attacking fires in electrical equipment, never use an extinguishing agent which conducts an electrical charge. LUX carries full Underwriters' approval for use against this type of fire. LUX is safe. Moreover, LUX gas, clean, dry-as-a-bone, does not harm wiring or motors. LUX portables are used to guard small motors. For bigger electrical machinery you'll want a Built-In LUX System. On electrical fires, LUX is a best bet.

LUX — SNUFFS OUT FIRE

Walter Kidde & Company
Incorporated
675 West St., Bloomfield, N. J.

DOES TWO JOBS



Make one Built-In LUX Extinguishing System do two jobs. If it now protects Room "A", you can extend protection to Room "B", too. Install nozzles, detector, piping in "B", with LUX Directional Valves to cover both rooms. Automatic or manual operation directs LUX discharge into either space. Your present LUX cylinders are all you need. That's a real saving!

FIRE FEEDS ON CARELESSNESS

As industrial activity steps up, more fires break out in plants. Sound safety practices are often ignored, housekeeping becomes careless when plants are being driven hard. These facts, plus sabotage, get fire off to a fast head start in wartime. Safety experts say—*"Don't get careless. Be even more strict as production increases."* Never let fire get the jump—no matter how busy you are!

READY FOR PUMPERS?

If you have a waterfront location, you can enjoy a real advantage when fire threatens. Fire Department pumpers can go right down to water's edge and get a brand new water supply. *Always have a road or a platform that lets the pumpers get close enough to immerse intake hoses.* This permits extra hose streams, extra protection in vital fire-fighting emergencies.

THIS ADVERTISEMENT IS ONE OF A SERIES APPEARING CURRENTLY IN INDUSTRIAL PUBLICATIONS.